

## BACKGROUND

The 2019 novel coronavirus (COVID-19) is a new virus that causes respiratory illness in people and can spread from person-to-person. Facemasks and respirators offer a physical barrier to contact with respiratory droplets and aerosols. When used correctly, masks, along with other preventative measures such as hand washing, and social distancing reduce the risk of SARS-CoV-2 transmission leading to COVID-19 infection.

## WHAT KIND OF MASKS ARE THERE?

There are several different types of masks and each has their own purpose:

- **Homemade Mask-** Homemade masks are designed to contain coughs and sneezes and prevent the disease from spreading to others. These are recommended for the general public when a person can't perform social distancing. Use these masks if you are coughing or sneezing, using public transportation or shopping and working at essential businesses like grocery stores and pharmacies. Homemade masks or cloth masks should be washed after each use and should not be worn when damp or wet.
- **Surgical Mask-** Surgical masks are designed for health care workers to stop aerosols from being spread by the person wearing it. These are recommended for health care providers during single or multiple patient interactions or routine health procedures. Surgical masks are also recommended when N95 masks are not available. Ideally these should be discarded after each patient encounter. Extended use is preferable to reuse. Both are important and viable options when supplies are limited.
- **N95 Respirator-** N95 Respirators are designed for health care workers in high risk situations and protect the person wearing them from aerosols, splatter, sprays or blood. These are recommended for health care providers who are performing procedures that put them most at risk of being exposed to the virus. Ideally these should be thrown away after each patient encounter. Extended use is preferable to reuse. Both are important and viable options when supplies are limited.

## WHAT KIND OF MASK SHOULD I WEAR?

- I am a member of the general public—I should wear a **HOMEMADE** mask. I can make my own mask or use a scarf or bandana.
- I am a healthcare worker in a moderate risk situation or a patient in a healthcare setting—I should wear a **SURGICAL MASK**.
- I am a healthcare worker in a high-risk situation—I should wear a **N95 RESPIRATOR**.

## RESOURCES FOR MORE INFORMATION

For more information on masks, follow CDC guidance on [Strategies to Optimize the Supply of PPE Equipment](#)

For more information on COVID-19 in Pennsylvania, visit

<https://www.health.pa.gov/topics/disease/Pages/Coronavirus.aspx>.

The latest information on the coronavirus in the U.S. and worldwide can be found on the [CDC website](#).

Additional information from the CDC on what to do if you are sick can be found [here](#).

Help is available, contact the Crisis Text Line by texting **PA to 741-741**.

## Understanding the Difference: Homemade Masks

	<b>N95 Respirator</b>	<b>Surgical Mask</b>	<b>Homemade Mask or Paper Mask</b>
User	Health Care Workers	Health Care Workers and patients in healthcare settings	General Public
Risk Factor	High Risk Situations	Moderate Risk Situations	Low Risk Situations
Design	Designed to protect the person wearing the mask from aerosols, splatter, sprays, or blood.	Designed for health care workers to stop droplets being spread by the wearer – NOT to protect the wearer from breathing in aerosols.	Designed to contain coughs and sneezes and prevent disease transmission to others – NOT to protect the wearer from breathing in aerosols.
When To Wear	Recommended for use when health care workers care for patients with COVID-19 and performing procedures that put them most at risk of virus exposure.	Recommended for health care providers during single or multiple patient interactions or routine health procedures. Surgical masks are also recommended when N95s are not available.	Recommended for use when a person can't perform social distancing. <ul style="list-style-type: none"> <li>• When coughing or sneezing.</li> <li>• Using public transportation.</li> <li>• Shopping and working at essential businesses like grocery stores and pharmacies.</li> </ul>
Fit Testing Required	Yes. Due to the fit, the wearer may find it hard to breathe. These masks are designed only for health care workers who have been fit tested.	No	No Scarves and bandanas can be used if necessary.
Use Limitations	Ideally should be discarded after each patient encounter. Extended use is preferable to reuse. Both are important and viable options when supplies are limited.  Extended use is preferable. Follow CDC guidance on <a href="#">Strategies to Optimize the Supply of PPE Equipment</a>	Ideally should be discarded after each patient encounter. Extended use is preferable to reuse. Both are important and viable options when supplies are limited.  Extended use is preferable. Follow CDC guidance on <a href="#">Strategies to Optimize the Supply of PPE Equipment</a>	Homemade/Cloth Masks: <ul style="list-style-type: none"> <li>• Should be washed after each use.</li> <li>• Should not be worn damp or when wet from spit or mucus.</li> </ul>

Facemasks and respirators offer a physical barrier to contact with respiratory droplets and aerosols. When used correctly, masks, along with other preventative measures such as hand washing, and social distancing reduce the risk of SARS-CoV-2 transmission leading to COVID-19 infection.

### Help Support Health Care Workers

Do not purchase masks designed for health care professionals. N95 and surgical masks are designed to protect those who are working in high risk situations with a likelihood of exposure. Instead, make your own mask or purchase one from an online small business.



# How to Sew a Face Mask

A tutorial on how to make your own fabric face mask from common household materials.

## TOOLS

- Needle and thread (and a sewing machine, if you have one)
- Scissors
- Pins or clips to hold fabrics in place (safety pins and paper clips will also work in a pinch)

## MATERIALS

- At least 20 by 20 inches of 100 percent cotton fabric, such as a flat tea towel
- 4 strips of cotton fabric for ties, about 18" long and ¾" wide  
OR 4 flat, clean shoelaces  
OR Two flat (1/4") sewing elastics that are 7" long each

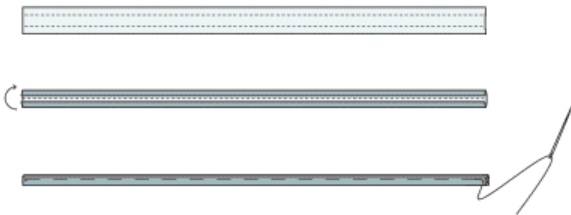
## STEP 1

### Prepare Your Materials

Choose your fabric, wash it on the warmest setting, and dry it on high heat. (Tea towels are better to use than T-shirts or linens, according to the Stanford Anesthesia Informatics and Media Lab.)

Fold the fabric in half. Measure and cut out a 9.5" x 6.5" rectangle to create two identically sized layers **using the sewing pattern below**. This is your mask base.

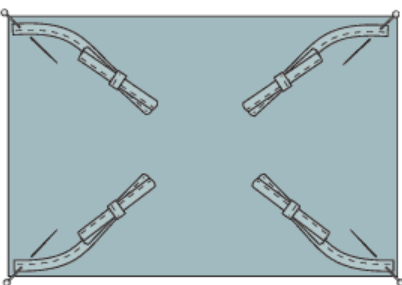
Now it's on to the fabric ties:



Cut 4 thin pieces of material, about 18" long and ¾" wide **using the sewing pattern on the right-hand side of the page**. Fold each piece of fabric twice lengthwise, then once more to tuck the rough edges inside. Sew a straight line along the middle. This will prevent the fabric ties from having frayed edges.

## STEP 2

### Adding the Ties



Take one of your rectangular fabric layers. With the "right side" (or the outer-facing side, where the pattern might be) facing you, pin down the 4 fabric ties, one piece per corner. Make sure that the ties are gathered in the center of the fabric layer before advancing to the next step.

You can also substitute sewing elastic for fabric ties, but note that elastic cannot be bleached (and therefore, is not as easy to clean) and that anyone with a latex allergy cannot wear it. (Elastic is also increasingly in short supply.) Attach elastics to the first layer of fabric by securing the ends at the corners, forming little hoops. Make sure the elastic lies inside the perimeter of your fabric.

## STEP 3

### Putting It Together

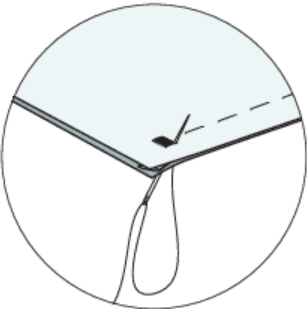
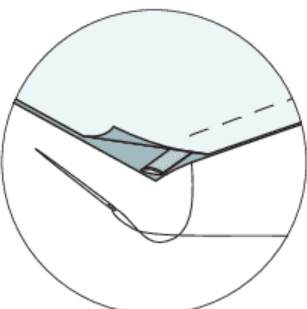


Take the second layer of fabric and line it up with the first. The "right sides" (or patterned sides) of the fabric should be facing each other, sandwiching the fabric ties or elastics.

Secure the fabric sandwich together with pins.

## STEP 4

### Start Stitching



Eyeball a midway point. From the middle, sew a straight line across the mask, about ¼" above the bottom edge of the fabric, toward the bottom left-hand corner. Remove any pins as you sew past them.

Make sure that the elastic or fabric ties are secured in the corners, sandwiched by your two layers of fabric, as you sew over their ends. You want to make sure your needle goes through the three pieces: the top layer, the end of the fabric tie, and the bottom layer. Add a couple stitches forward and backward (in both directions) to secure your ties in place.

## STEP 5

### Stitch Around

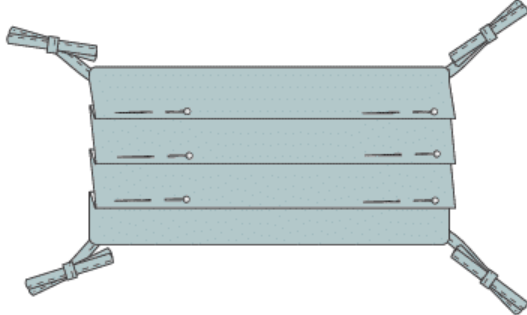


Stitch around the perimeter of the fabric layers, repeating the forward and backward motion at each corner to secure all the elastic ends or fabric ties.

Continue to stitch your way toward the starting point, but stop to allow for a 1 ½" gap.

## STEP 6

### Turn Out

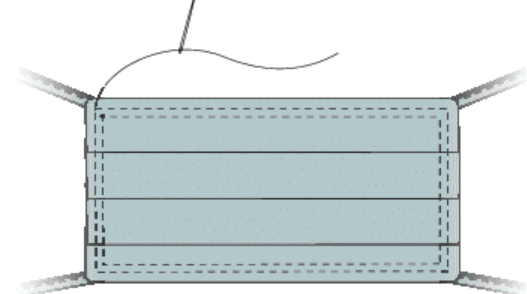


Turn your project right-side out from the little 1 ½" gap. Your fabric ties or elastics should now stick out, like little legs.

Make three staggered pleats lengthwise on the mask, as if folding a paper fan. This helps the mask conform to the wearer's face. Secure each pleat with pins.

## STEP 7

### Finishing Up



With your pleats held in place by pins, stitch around the perimeter of the mask, ¼" away from the edge of the seam. This is called a top stitch. Take care when stitching over the pleats as the fabric may be quite thick.

Top stitch a second time around, about ¼" in from the first round of stitching. Now you have a completed mask.

